REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 5-16, and 21-68 are pending. Claims 32 and 46 have been amended by the present amendment. Claims 44, 58, and 66 have been canceled without prejudice or disclaimer by the present amendment. The amendments to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, Claims 32, 37, 38, 45, 46, 52, 53, and 61 were rejected under 35 U.S.C. § 102(b) as being anticipated by Inoue et al., "A Digital Watermark Base on the Wavelet Transform and its Robustness on Image Compression", International Conference on Image Processing, 1998 (hereinafter, referred to as "Inoue"). Claims 44, 58, 60, and 66 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Su et al., "Blind Digital Watermarking for Cartoon and Map Images", Proceedings of the SPIE, 1999 (hereinafter referred to as "Su"). Claims 5-16, 21-31, 39, 41, 43, 54-57, 59, 63-65, 67, and 68 were allowed. Claims 33-36, 47-51, and 62 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants acknowledge with appreciation the indication of allowable subject matter.

The Applicants' representatives conducted a personal interview with the Examiner and his supervisor on January 12, 2006. Applicants' representatives explained that the feature of Claims 32 and 46 directed to "corresponding symbol of the watermark data are pseudo random symbols" is not disclosed in Inoue.

Although the Examiner agreed that Inoue did not explicitly disclose this limitation of Claims 32 and 46, the Examiner and his supervisor asserted that this feature was well known in the art. The Examiner provided justification by citing several additional references such as

Cox et al. (U.S. Patent No. 5,848,155, U.S. Patent No. 5,930,369) and Doneson et al. (U.S.

Patent No. 6,674,873) which the Examiner indicated he would cite on a Form PTO 892 in the

next Action. It was further suggested that Applicants might consider amending the last

element of Claim 32 to further distinguish the prior art.

Currently amended Claim 32 is directed to a method of embedding data in an

information signal representing material, said material includes steps of: (a) producing

transform coefficients Ci of the material, (b) comparing the magnitudes of the coefficients

with the threshold value T, (c) producing modified coefficient value Ci' by adding an

additive offset to the coefficient Ci, wherein the offset is an information symbol of a pseudo

random symbol sequence modulated by the data to be embedded, wherein the step of

producing modified coefficient values does not use coefficients of magnitude greater than

said threshold T and does not use corresponding information symbols of the pseudo random

symbol sequence, the value of said threshold T being set to reduce the likelihood of any

coefficient having a dominant affect on a correlation of the pseudo random symbol sequence

and the information signal in which the data has been embedded.

Inoue is directed to methods of digital watermarking for image signals based on

wavelet transform. Inoue teaches (page 392) that if the wavelet coefficient has a magnitude

which is less than the threshold T then that coefficient is regarded as "insignificant" and

accordingly data is embedded into that insignificant coefficient. This is done by writing the

same data into the location of the insignificant coefficient. Furthermore, Inoue identifies that

wavelet coefficients which are regarded as significant, that is having a magnitude greater than

the threshold are used to embed the watermark by applying the watermark coefficients to

detailed portions, which edges are complicated picture areas. However, nowhere in Inoue is

there disclosed the limitation that if the wavelet coefficient is greater than the threshold T

then the step of producing the modified coefficient values, does not use these coefficients

having a magnitude greater than the threshold and does not use the corresponding

information symbols of the pseudo random symbol sequence.

Furthermore, Applicants amended Claim 32 to indicate that <u>the modified coefficient</u>

<u>Ci' is generated by adding an additive offset to the coefficient Ci,</u> wherein said offset is an

information symbol of a pseudo random sequence modulated by said data to be embedded.

<u>Inoue</u> does not teach or suggest that: (a) the modified coefficient value Ci' is

produced by adding an offset to the coefficient Ci, nor (b) the offset is an information symbol

of a pseudo random sequence modulated by said data to be embedded.

Thus, Applicants respectfully submit that <u>Inoue</u> does not anticipate Claim 32, hence

Claim 32 (and dependent Claims 33-38) should be made allowable.

Amended Claim 46 recites limitations analogous to the limitations recited in amended

Claim 32. Accordingly, for all of the reasons stated above for the patentability of Claim 32,

Applicants respectfully submit that the rejection of Claim 46 (and dependent Claims 47-53)

should be withdrawn.

Consequently, in view of the present amendment and in light of the above discussion,

the outstanding grounds for rejection are believed to have been overcome. The application as

amended herewith is believed to be in condition for formal allowance. An early and

favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 06/04)

Bradley D. Lytle
Attorney of Record
Registration No. 40,073

I:\ATTY\SMS\28's\282428US\282428US-AM.DOC

18